

Claims

1. Method of preparing a composition comprising mixing a silica sol having an S-value from about 5 to about 50 % and a mineral acid.
- 5 2. Method according to claim 1, wherein the S-value is from about 8 to about 40 %.
3. Method according to claim 1 or 2, wherein the S-value is from about 12 to about 35 %.
- 10 4. Method according to any of claims 1-3, wherein the silica sol has a specific surface area from about 400 to about 1200 m²/g.
5. Method according to any of claims 1-4, wherein the silica sol has a specific surface area from about 500 to about 1000 m²/g.
- 15 6. Method according to any of claims 1-5, wherein the silica sol has a specific surface area from about 600 to about 900 m²/g.
7. Method according to any of claims 1-6, wherein the mineral acid is sulphuric acid.
8. Method according to any of claims 1-6, wherein the mineral acid is hydrochloric acid, nitric acid, phosphoric acid, and mixtures thereof.
- 20 9. Method according to any of claims 1-8, wherein orthophosphoric acid and/or sodium sulphate is further added.
10. Method according to any of claims 1-9, wherein the weight ratio of silica to mineral acid is from about 1:100 to about 25:100.
11. Method of producing a battery comprising providing a composition according to any of claims 1-10.
- 25 12. Composition obtainable by the method according to any of claims 1-10.
13. Composition comprising a network of silica particles and mineral acid, wherein the silica particles have a particle size of from about 2 to about 7 nm.
14. Composition according to claim 11 or 12, wherein the weight ratio of silica to mineral acid is from about 1:100 to about 25:100.
- 30 15. Use of a composition according to any of claims 11-13 as a gelled electrolyte in a battery.